DWQ's Stormwater Programs: Overview and Recent Changes

Eastern Carolina Environmental Conference

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Scott Vinson

Stormwater Permitting Unit – Washington Regional

Outline

- Why Manage Stormwater?
- Overview of Stormwater Program Areas
  - What Are They & Who's Covered?
  - Recent / Upcoming Changes
- Who Has to do What, Where?
- Stormwater Permitting Interactive Map
- SW Management
- Information Resources

Why Do I Have to Manage and Treat Stormwater?

- Federal Regulations
  - Mandated by Federal Government & EPA
- N.C. General Statutes
  - Approved by the Legislature
- N.C. Session Laws
  - Approved by the Legislature
- N.C. Administrative Codes
  - Approved and adopted by the Environmental Management Commission

Stormwater Program Areas

- Federal Program
  - Phase I
  - Phase II
- State Stormwater Program
  - Phase II Post-Construction (Session Law 2006-246)
  - Water Supply Watershed
  - Nutrient Sensitive Waters
  - High Quality Waters / Outstanding Resource Waters
  - Coastal Stormwater (Session Law 2008-211)
  - Special Management Strategies (e.g., Goose Creek)
  - Universal SW Program
  - 401 Water Quality Certifications

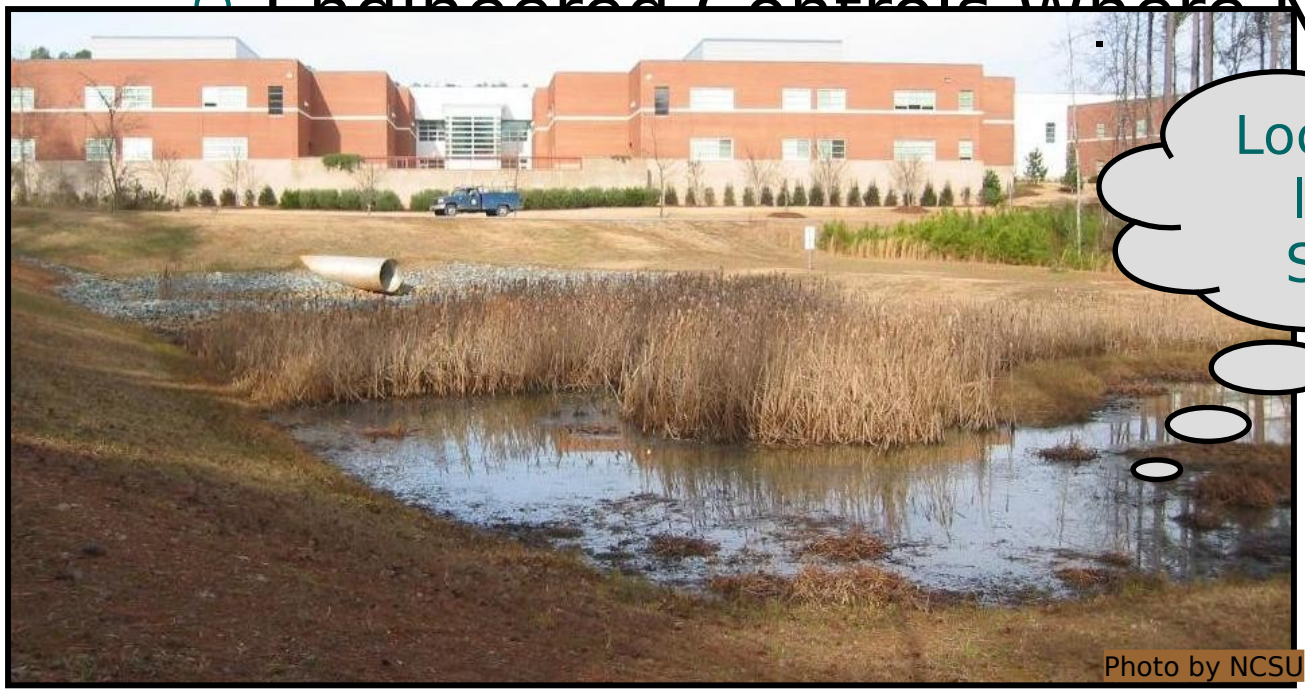
Where Do I Find These Programs?

http://portal.ncdenr.org/web/wq/ws/su/statesw/rule

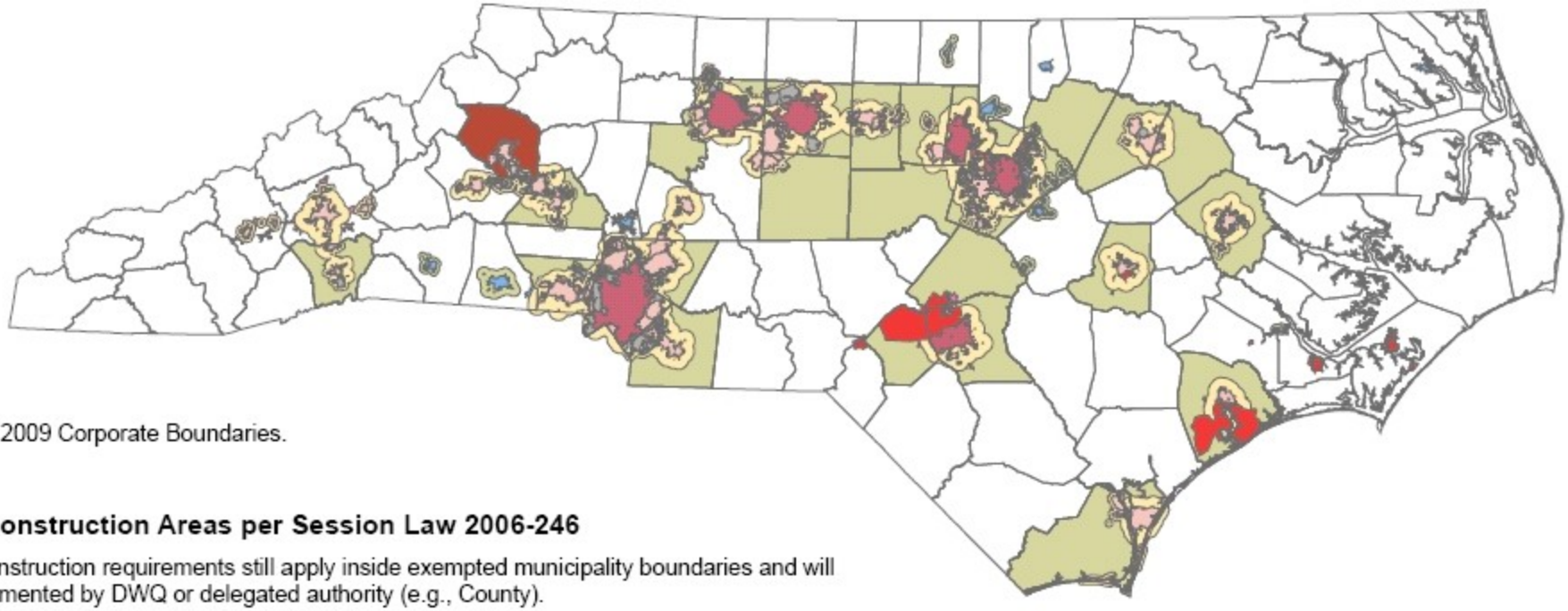
Program	Session Laws	General Statutes	NC Administrative Codes
Phase II Post-Construc.	2006-246		
Water Supply	2005-190	143-214	Red Book
NSWs			Red Book
HQW/ORW		143-214.7	Red Book / Blue Book
Coastal Rules	2008-211	143-214.7	Blue Book
Sugar Creek			Red Book

Post-Construction Stormwater

- Minimize Built-Upon Area (BUA) or Imperviousness
- Use Passive Stormwater Management
- Engineered Controls Where Necessary



Phase II Post-Construction Session Law 2006-246: Who's Covered?



Reflects 2009 Corporate Boundaries.

Post-Construction Areas per Session Law 2006-246

*Post-Construction requirements still apply inside exempted municipality boundaries and will be implemented by DWQ or delegated authority (e.g., County).

Legend

- NPDES-Exempt Phase II Municipalities + ETJs

Phase II NPDES Entities

- NPDES Permit - Phase I MS4/Military
- NPDES Permitted Ph II MS4/Co
- NPDES Permitted Phase I MS4
- NPDES Permitted Phase I/II city ETJ
- NPDES Permitted Phase II MS4
- Phase II MSIs (from 2009 Boundaries)
- Designated Phase II Municipalities
- Future MSIs (2010 Delineations)
- Urbanizing Areas (2000 Census)
- Phase II Tipped Counties (Post-Construction)

6/18/2010

Note: Although Brunswick, New Hanover, and Onslow are Phase II Tipped Counties, projects there are subject to the Coastal Stormwater Rules.

N

0 20 40 80 Miles

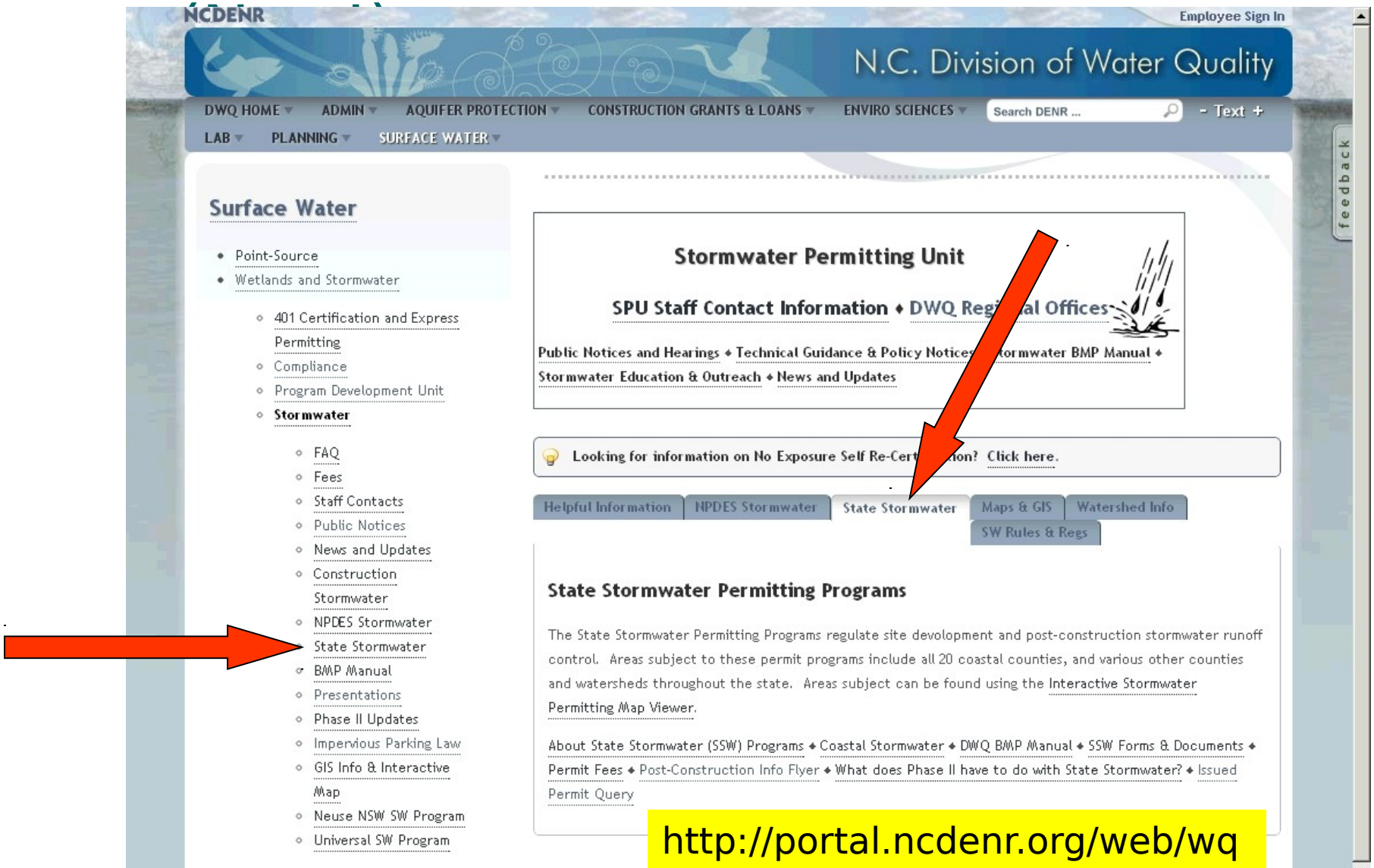
Phase II Post-Construction & State Coastal Stormwater Programs

- Who Implements it? It depends!
  - Local Government
  - DWQ Central Office
  - DWQ Regional Office
- What's Required?
  - High density– control and treat runoff from first 1" or 1.5" (coastal counties) of rain
  - Remove 85% Total Suspended Solids (TSS)
  - Treatment volume draw-down within 2-5 days
  - 12% BUA threshold for shellfish waters, otherwise $\leq$ 24% is low density

Phase II Post-Construction: Recent Changes

- State designations of more communities possible
- Change in how wetlands factor into BUA percentage calculation (from new Coastal Rules effec. October 1, 2008)
- Applies to mine activities where impervious surface being added, even when no E&SC Plan

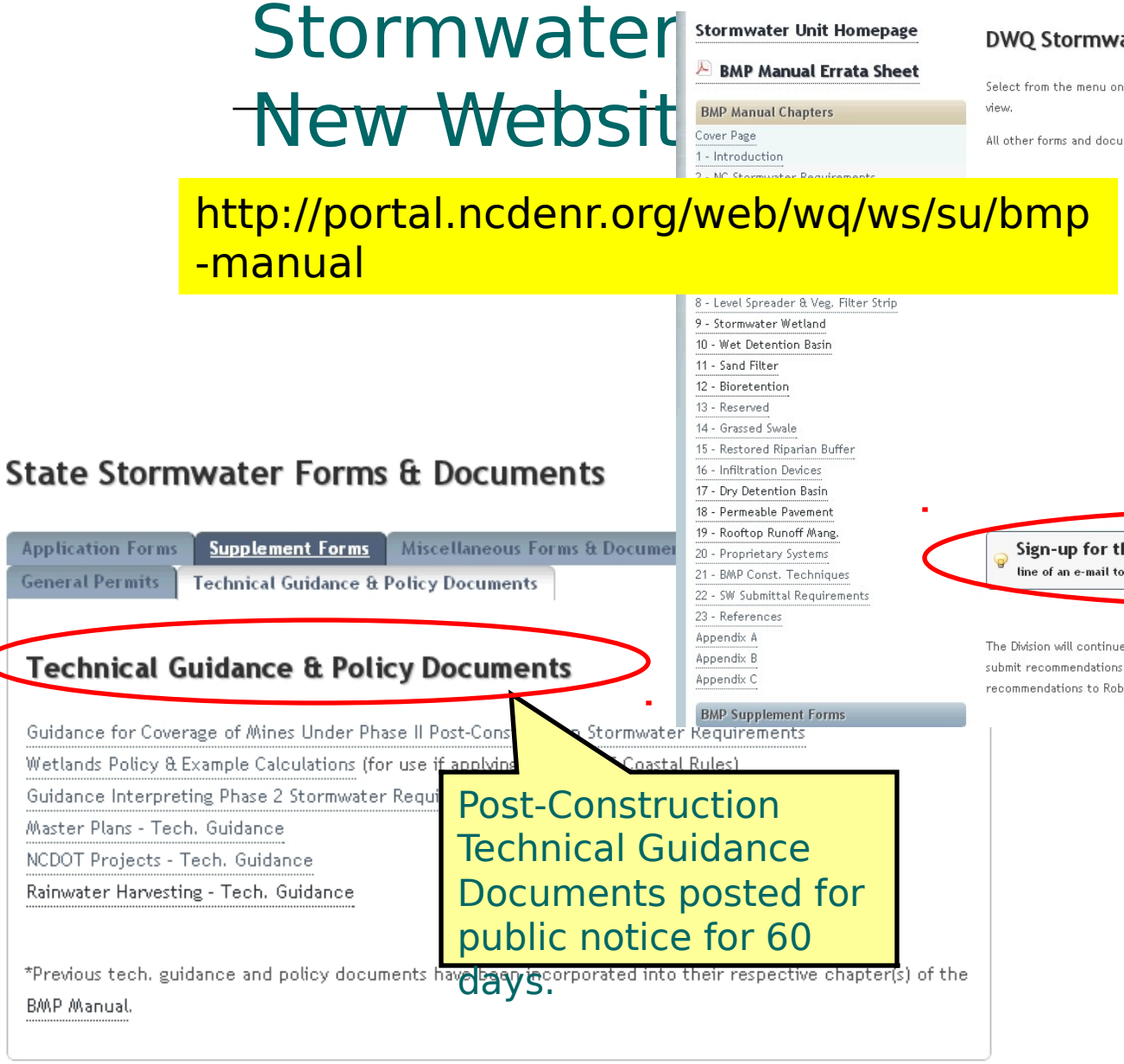
Phase II Post-Construction: Where to Find More Information

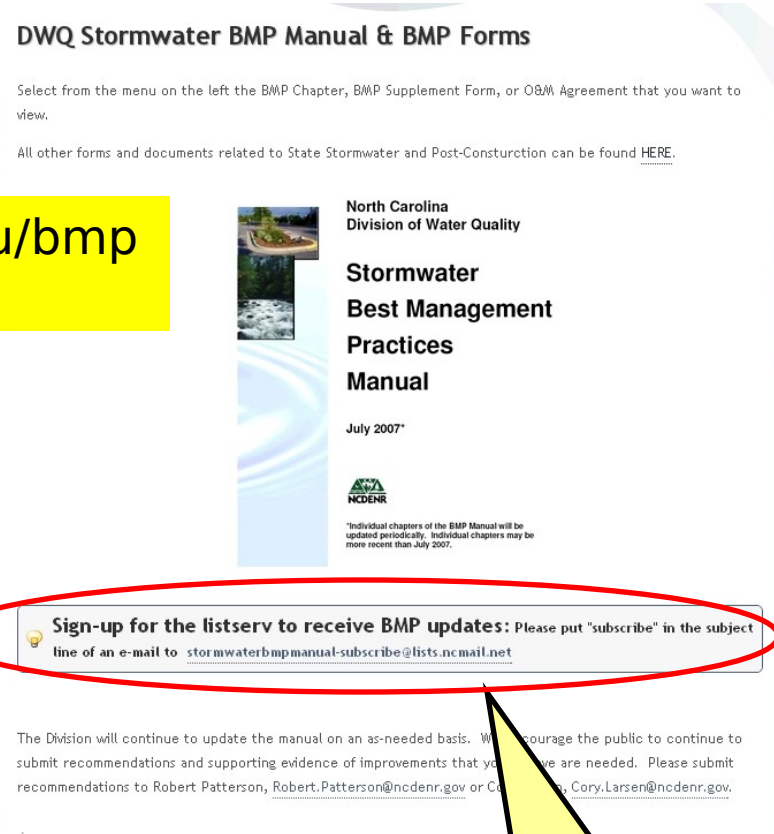


http://portal.ncdenr.org/web/wq

Ph II Post Construction/State Stormwater ~~New Websit~~

http://portal.ncdenr.org/web/wq/ws/su/bmp-manual

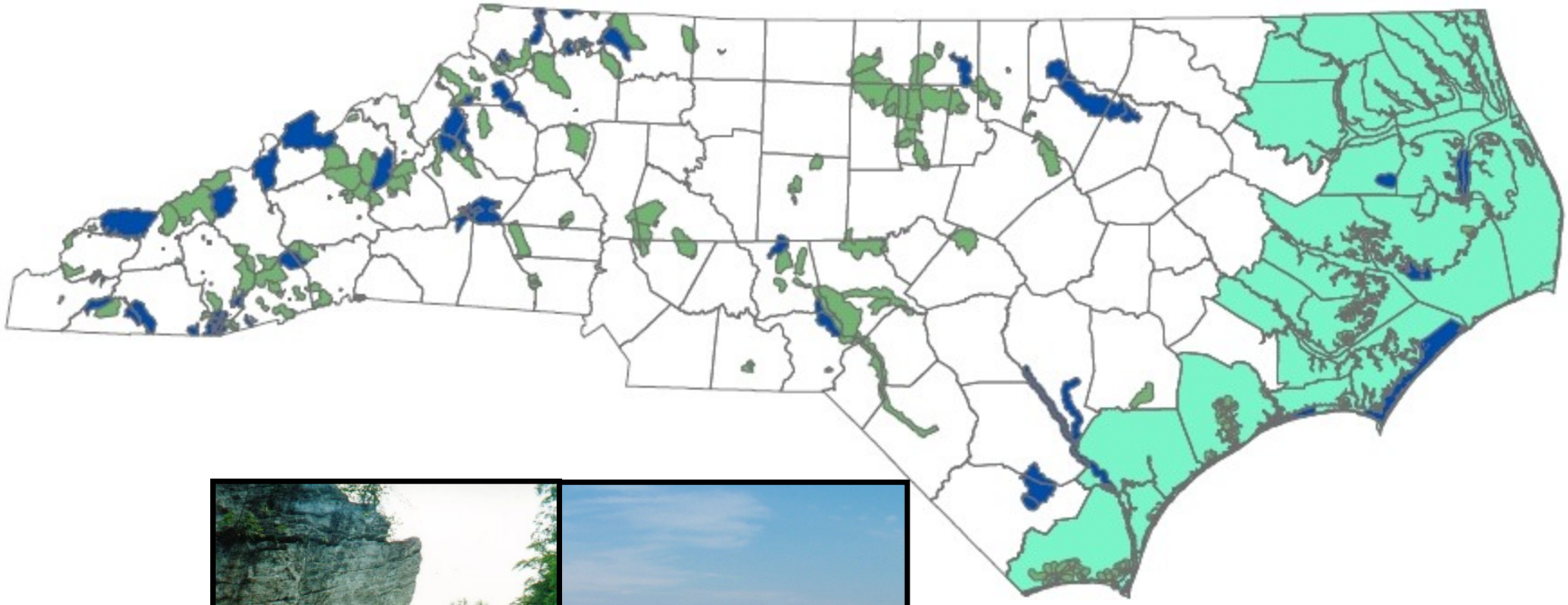

Stormwater Unit Homepage
BMP Manual Errata Sheet
BMP Manual Chapters
Cover Page
1 - Introduction
8 - Level Spreader & Veg. Filter Strip
9 - Stormwater Wetland
10 - Wet Detention Basin
11 - Sand Filter
12 - Bioretention
13 - Reserved
14 - Grassed Swale
15 - Restored Riparian Buffer
16 - Infiltration Devices
17 - Dry Detention Basin
18 - Permeable Pavement
19 - Rooftop Runoff Mang.
20 - Proprietary Systems
21 - BMP Const. Techniques
22 - SW Submittal Requirements
23 - References
Appendix A
Appendix B
Appendix C
BMP Supplement Forms
State Stormwater Forms & Documents
Application Forms
Supplement Forms
Miscellaneous Forms & Documer
General Permits
Technical Guidance & Policy Documents
Technical Guidance & Policy Documents
Guidance for Coverage of Mines Under Phase II Post-Cons
Stormwater Requirements
Wetlands Policy & Example Calculations (for use if applyin
Coastal Rules)
Guidance Interpreting Phase 2 Stormwater Requi
Master Plans - Tech. Guidance
NCDOT Projects - Tech. Guidance
Rainwater Harvesting - Tech. Guidance
*Previous tech. guidance and policy documents have been incorporated into their respective chapter(s) of the BMP Manual.

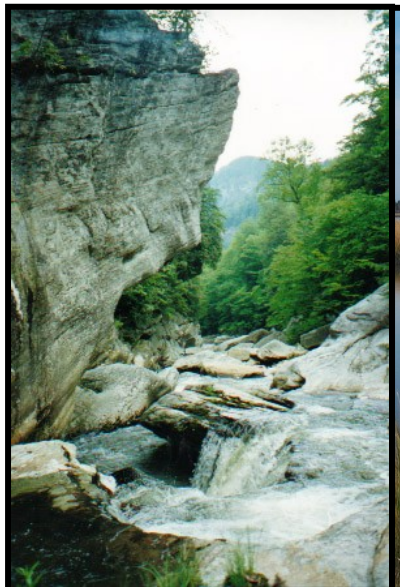

DWQ Stormwater BMP Manual & BMP Forms
Select from the menu on the left the BMP Chapter, BMP Supplement Form, or O&M Agreement that you want to view.
All other forms and documents related to State Stormwater and Post-Consturction can be found HERE.
North Carolina
Division of Water Quality
Stormwater
Best Management
Practices
Manual
July 2007*
NCDENR
*Individual chapters of the BMP Manual will be updated periodically. Individual chapters may be more recent than July 2007.
Sign-up for the listserv to receive BMP updates: Please put "subscribe" in the subject line of an e-mail to stormwaterbmpmanual-subscribe@lists.ncmail.net
The Division will continue to update the manual on an as-needed basis.
courage the public to continue to submit recommendations and supporting evidence of improvements that yo
ve are needed. Please submit recommendations to Robert Patterson, Robert.Patterson@ncdenr.gov or C
Cory.Larsen@ncdenr.gov.

Post-Construction Technical Guidance Documents posted for public notice for 60 days.

Sign up for the BMP Manual listserv to stay up to date.

HQW, ORW and Coastal SW Program





CLOSED AREA
UNLAWFUL TO TAKE OYSTERS, CLAMS, OR MUSSELS. SHELLFISH MAY CAUSE SERIOUS ILLNESS IF EATEN.
NC MARINE FISHERIES

Legend

- ORW
- HQW (non-coastal)
- HQW (coastal)
- Coastal Counties (CAMA)

N

Rules in 15A NCAC 2H .1000

HQW, ORW and Coastal Stormwater

- Permit required for any development activities that require an Erosion and Sedimentation Control Plan (for disturbances of one or more acres) or a CAMA major permit and meet any of the following criteria:
  - Located within the 20 coastal counties,

    -OR-
  - Drain to Outstanding Resource Waters,

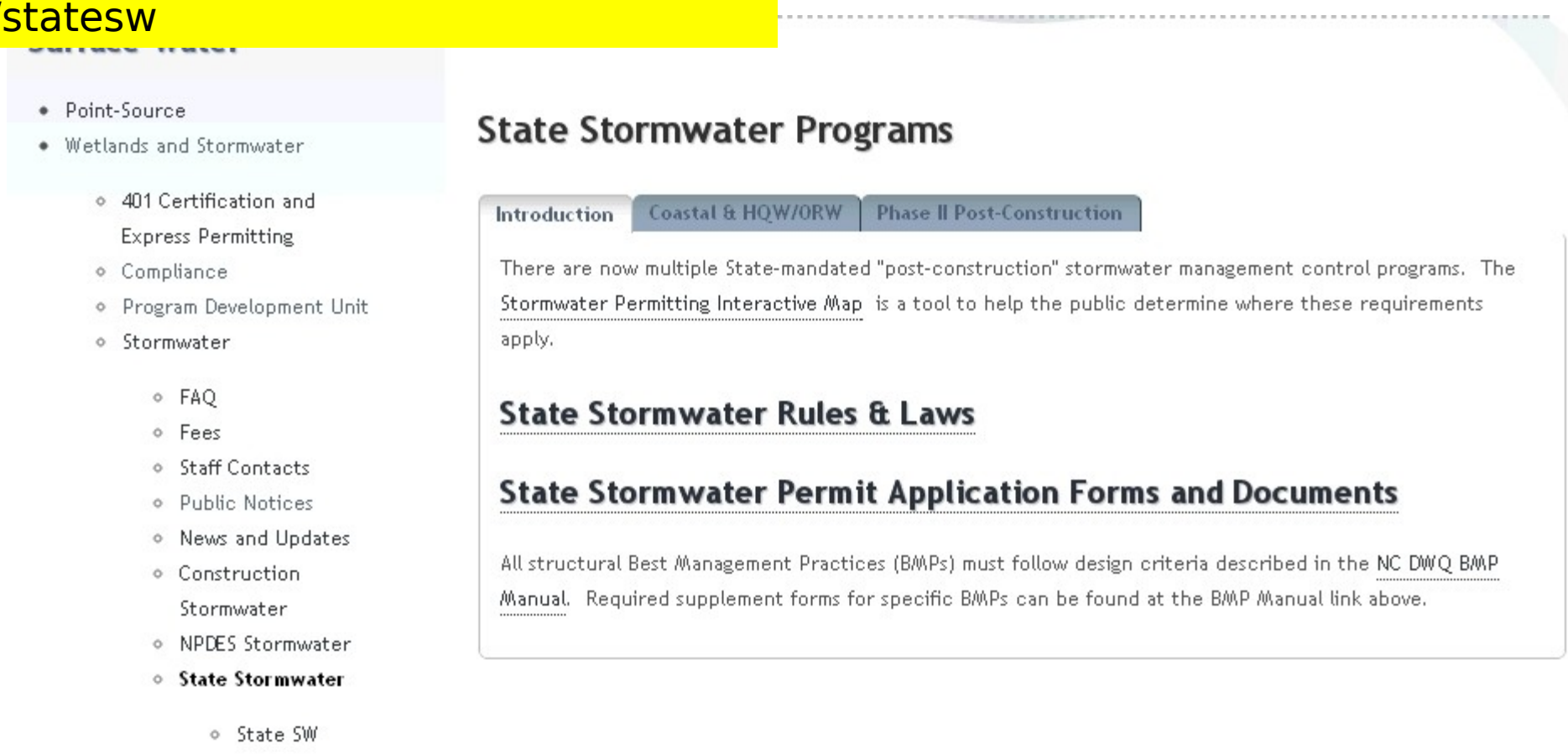
    -OR-
  - Located within 1-mile and drain to High Quality Waters

Recent? Changes: Coastal Stormwater

- Effective October 1, 2008 - New Requirements in Session Law 2008-211
- Non-residential development activities that disturb less than one acre but add 10,000 square feet or more of built upon area require a permit.
- Residential development activities within ½-mile of and draining to shellfishing waters that disturb less than one acre but add more than 10,000 square feet of built upon area, resulting in 12% total built upon area or more, also require a Coastal State Stormwater permit.

Coastal Stormwater Management: Where to Find More Information

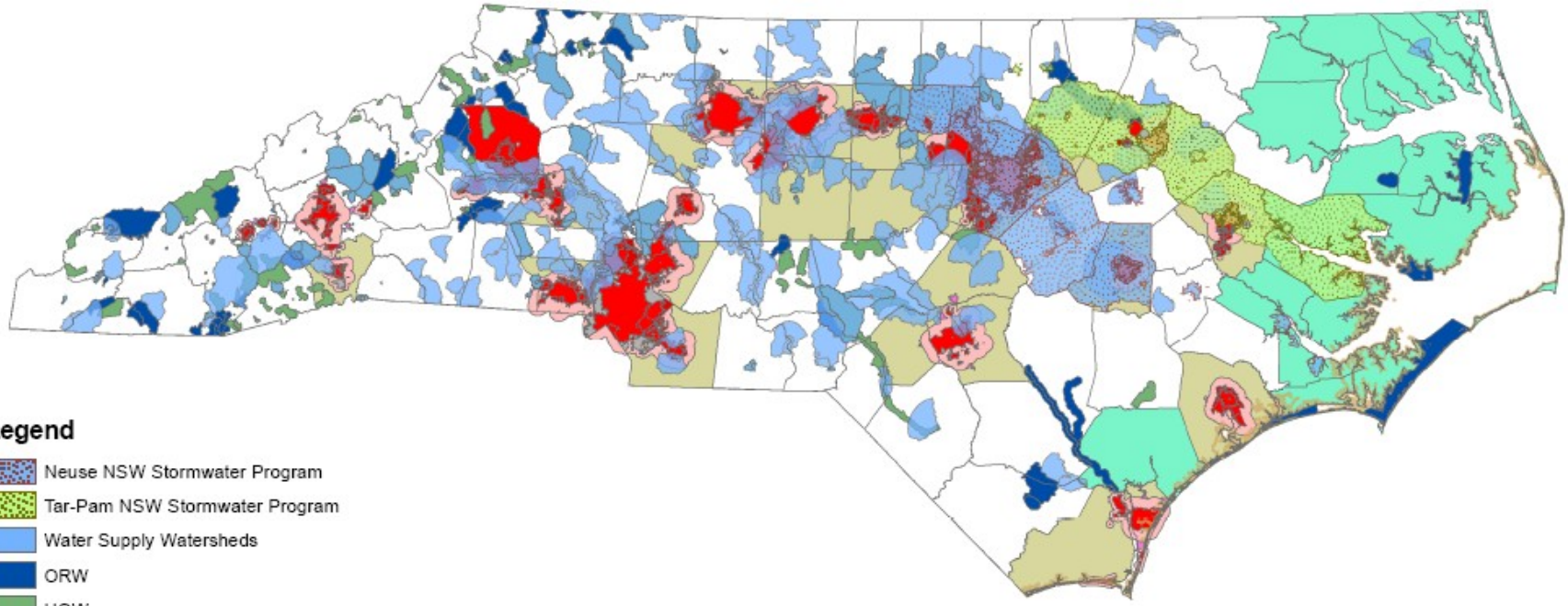
http://portal.ncdenr.org/web/wq/ws/su/statesw


Point-Source
Wetlands and Stormwater
401 Certification and Express Permitting
Compliance
Program Development Unit
Stormwater
FAQ
Fees
Staff Contacts
Public Notices
News and Updates
Construction Stormwater
NPDES Stormwater
State Stormwater
State SW
State Stormwater Programs
Introduction
Coastal & HQW/ORW
Phase II Post-Construction
There are now multiple State-mandated "post-construction" stormwater management control programs. The Stormwater Permitting Interactive Map is a tool to help the public determine where these requirements apply.
State Stormwater Rules & Laws
State Stormwater Permit Application Forms and Documents
All structural Best Management Practices (BMPs) must follow design criteria described in the NC DWQ BMP Manual. Required supplement forms for specific BMPs can be found at the BMP Manual link above.

Universal Stormwater Management Program

- Voluntary program for local governments to implement which are simpler to understand and administer –
- Does not establish new SW control requirements where none currently exist
- Will satisfy post-construction requirements of almost all existing SW programs
- See 15A NCAC 2H .1020
- USMP has been adopted by
  - Emerald Isle, Kure Beach
  - Ahoskie, Butner, Monroe

Stormwater Management Programs: All Together Now!



Legend

- Neuse NSW Stormwater Program
- Tar-Pam NSW Stormwater Program
- Water Supply Watersheds
- ORW
- HQW
- SA (Shellfish) Areas
- Exempt Municipalities and ETJs (as of July 7, 2007)*
- NPDES Phase I & II Municipalities
- NPDES Phase I & II ETJs (2007)
- NPDES Phase I & II Counties
- Phase II MSIs (from 2007 Boundaries)
- Designated Phase II Municipalities (as of October 1, 2008)
- Urbanizing Areas (2000 Census)
- Phase II Tipped Counties (Post-Construction)
- Coastal Counties - Coastal Stormwater Rules

Phase II Areas per Session Law 2006-246

*Phase II Post-Construction requirements still apply inside exempted municipality boundaries and will be implemented by DWQ or delegated authority (e.g., County).

N

0 25 50 100 Miles

12/19/2008

Use the Stormwater Permitting Interactive Map!

Surface Water

- Point-Source
- Wetlands and Stormwater
  - 401 Certification and Express Permitting
  - Compliance
  - Program Development Unit
  - Stormwater
    - FAQ
    - Fees
    - Staff Contacts
    - Public Notices
    - News and Updates
    - Construction Stormwater
    - NPDES Stormwater
    - State Stormwater
    - BMP Manual
    - Presentations
    - Phase II Updates
    - Impervious Parking Law
    - **GIS Info & Interactive Map**
    - Neuse NSW SW Program
    - Universal SW Program

Stormwater Maps and GIS Resources

Stormwater Permitting Interactive Map ♦ Stormwater GIS Data and Maps

Stormwater Permitting Interactive Map Viewer

The Department, Division and NC Center For Geographic Information and Analysis have worked to establish an interactive web-based mapping system to help development activities determine whether they are covered by the post-construction permitting program or other Stormwater permitting requirements. Please read the notes below associated with the use of information from this mapping system. As with any system of this type, it should be viewed as simply a tool to help you in making your final determination about your responsibilities for permit coverage.

Map last updated: August 17, 2010

Important Updates and Corrections | *Archived Corrections*

Stormwater Permitting Interactive Map

Please read this information about map results ♦ Guidance on overlapping programs

Map Tutorial ♦ *Quick tips for using this map*

Post-Construction Permit Application

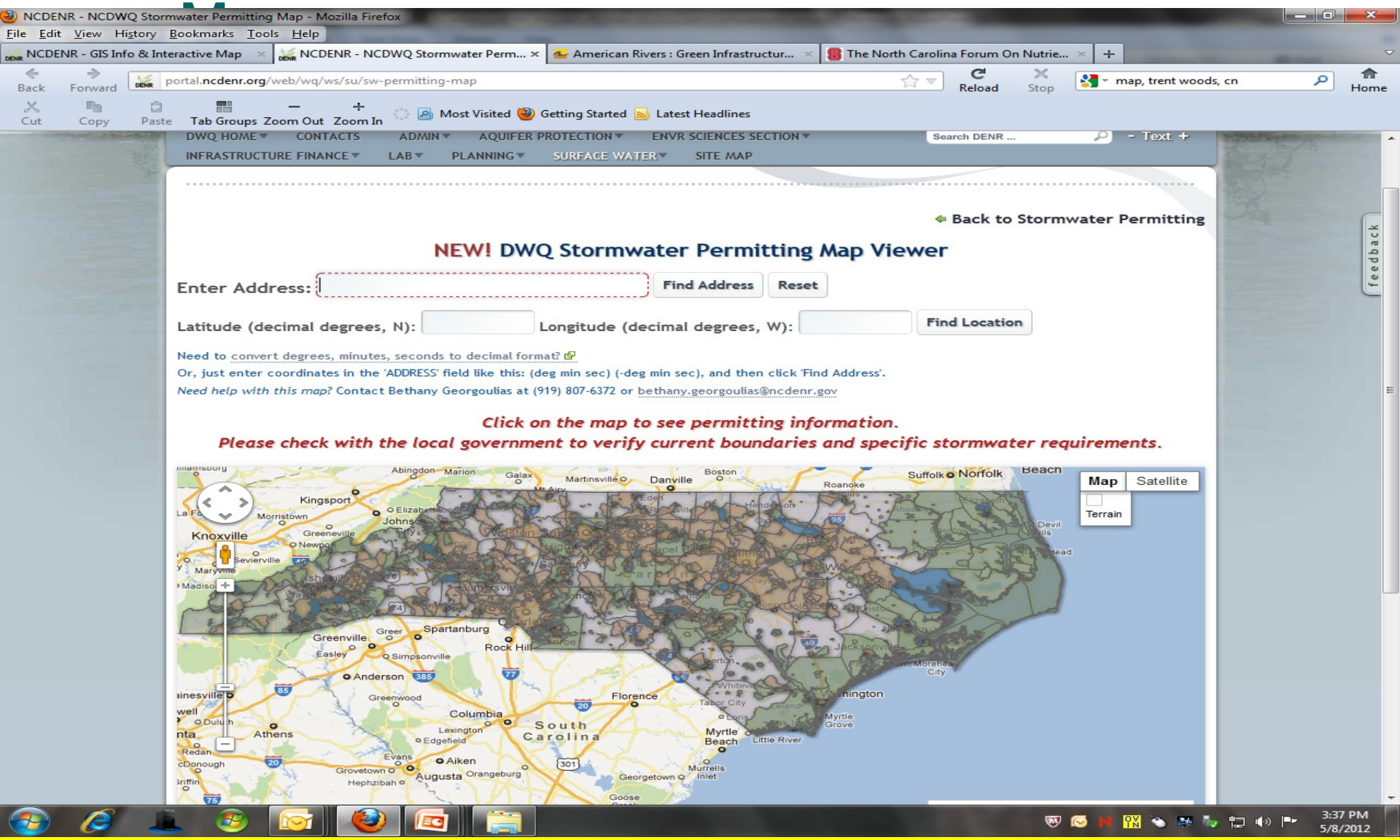
Post-Construction Information

Phase II Entity Designations and Updates

Phase II Tipped Counties (list) (map)

http://portal.ncdenr.org/web/wq/ws/su/maps

Stormwater Permitting Interactive



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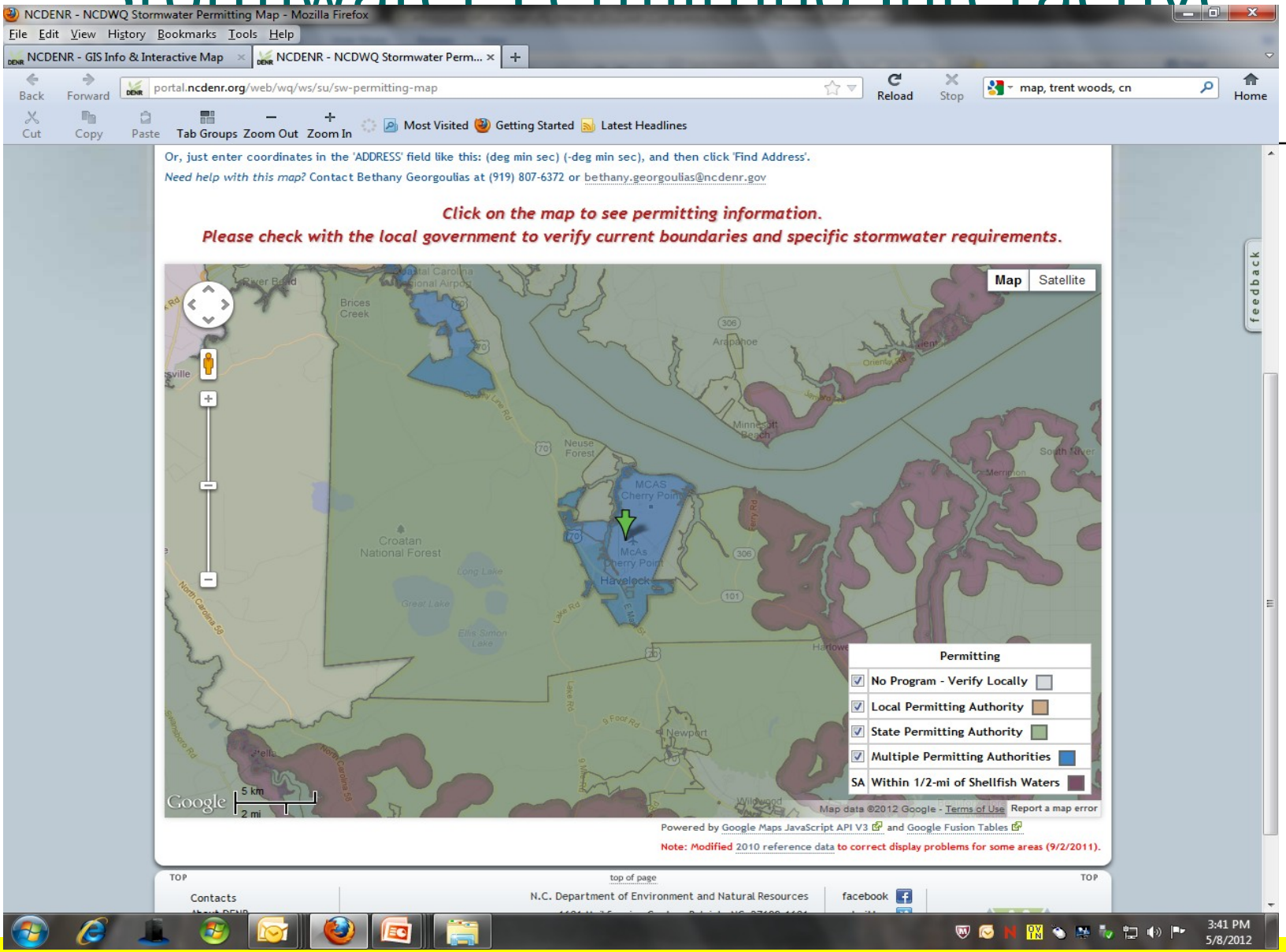
NCDENR - NCDWQ Stormwater Permitting Map - Mozilla Firefox
File Edit View History Bookmarks Tools Help
NCDENR - GIS Info & Interactive Map
NCDENR - NCDWQ Stormwater Perm...
portal.ncdenr.org/web/wq/ws/su/sw-permitting-map
Back Forward Reload Stop Home
Cut Copy Paste Tab Groups Zoom Out Zoom In
Most Visited Getting Started Latest Headlines
Or, just enter coordinates in the 'ADDRESS' field like this: (deg min sec) (-deg min sec), and then click 'Find Address'.
Need help with this map? Contact Bethany Georgoulias at (919) 807-6372 or bethany.georgoulias@ncdenr.gov
Click on the map to see permitting information.
Please check with the local government to verify current boundaries and specific stormwater requirements.
Map
Satellite
Permitting
No Program - Verify Locally
Local Permitting Authority
State Permitting Authority
Multiple Permitting Authorities
SA Within 1/2-mi of Shellfish Waters
Croatan National Forest
MCAS Cherry Point
Havelock
Newport
Google
5 km
2 mi
Map data ©2012 Google - Terms of Use
Report a map error
Powered by Google Maps JavaScript API V3 and Google Fusion Tables
Note: Modified 2010 reference data to correct display problems for some areas (9/2/2011).
feedback
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Contacts
N.C. Department of Environment and Natural Resources
facebook
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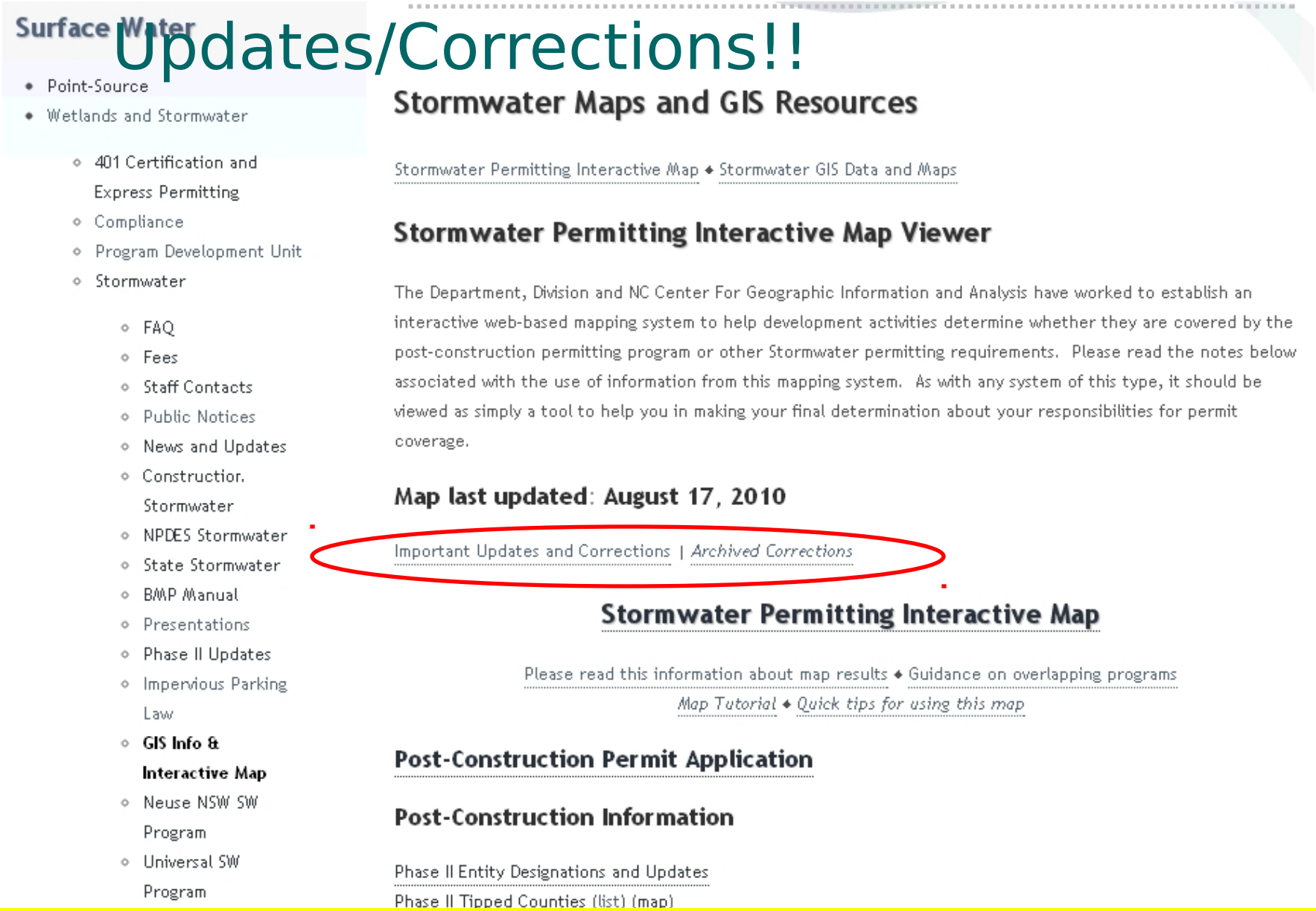
5/8/2012

http://portal.ncdenr.org/web/wq/ws/su/maps#Interactive_

Be Sure to Check for Updates/Corrections!!



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    - Universal SW Program

Stormwater Maps and GIS Resources

Stormwater Permitting Interactive Map ◆ Stormwater GIS Data and Maps

Stormwater Permitting Interactive Map Viewer

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Stormwater Permitting Interactive Map

Please read this information about map results ◆ Guidance on overlapping programs

Map Tutorial ◆ *Quick tips for using this map*

Post-Construction Permit Application

Post-Construction Information

Phase II Entity Designations and Updates

Phase II Tipped Counties (list) (map)

http://portal.ncdenr.org/web/wq/ws/su/maps#Interactive_

Who All's Involved?

- DWQ Central Offices
  - Stormwater Permitting Unit - Central Office
- DWQ 7 Regional Offices
  - Raleigh (separate from Central)
  - Winston-Salem
  - Fayetteville
  - Mooresville
  - Asheville
  - Wilmington – 5 southern coastal counties
  - Washington – 15 northern coastal counties (Scott & Samir)
- Local Governments

Websites of Interest

- DENR Stormwater Permitting Unit: http://portal.ncdenr.org/web/wq/ws/su
- DWQ ROs:
- http://portal.ncdenr.org/web/guest
- General Statutes and Regulations: http://www.ncleg.net/gascripts/statutes/statutes.asp
- Stormwater Interactive Map:

  http://portal.ncdenr.org/web/wq/ws/su/maps#Interactive_Map/

For further information, please contact:

- Stormwater Permitting Unit
  - Phone: (919) 807-6300
  - Website: http://portal.ncdenr.org/web/wq/ws/su
- Coastal Regional Offices
  - Wilmington Phone: (910) 796-7215
  - Washington Phone: (252) 946-6481